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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/974,040	10/09/2001	Robert S. Kody	56685US002	7546

32692 7590 02/12/2003

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EXAMINER

THOMPSON, CAMIE S

ART UNIT	PAPER NUMBER
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1774

DATE MAILED: 02/12/2003

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/974,040

Applicant(s)

KODY ET AL.

Examiner

Camie S Thompson

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-44

is/are pending in the application.

4a) Of the above claim(s) 39-44 is/are withdrawn from consideration.

- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-39 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

DETAILED ACTION

Election/Restrictions

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
 - I. Claim 1-38, drawn to a multi-layer film and article, classified in class 428, subclass 292.1.
 - II. Claims 39-44, drawn to a method of producing a micro-fiber forming multi-layer film, classified in class 264, subclass 165.

The inventions are distinct, each from the other because of the following reasons:

2. Inventions I and II are related as process of making and product made. The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make other and materially different product or (2) that the product as claimed can be made by another and materially different process (MPEP § 806.05(f)). In the instant case, wood pulp fibers can be used to make a multi-layered film.
3. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.
4. During a telephone conversation with on Kent S. Kokko a provisional election was made without traverse to prosecute the invention of Group I, claims 1-38. Applicant in replying to this Office action must make affirmation of this election. Claims 39-44 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

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5. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Specification

6. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

Claim Objections

7. Claims 6, 10, 27 and 38 are objected to because of the following informalities: There is a colon after the phrase "consisting of" in each of the claims. Examiner suggests removing the colon. Appropriate correction is required.

Claim Rejections - 35 USC § 102

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) do not apply to the examination of this application as the application being examined was not (1) filed on or after November 29, 2000, or (2) voluntarily published under 35 U.S.C. 122(b). Therefore, this application is examined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

9. Claims 1-2, 5-23 and 25-33 are rejected under 35 U.S.C. 102(e) as being anticipated by Perez et al., U.S. 6,331,343.

Perez discloses novel oriented films that can be multi-layer films having at least one fibrous surface wherein the films are useful in applications such as backings for tapes as per instant claim 1 (see column 1, lines 59-68 and column 13, lines 55-68). Perez discloses that the films may be uniaxially oriented to produce a fibrous surface having polymeric microfibers of average effective diameter of less than 20 microns and having a transverse aspect ratio of from 1.5:1 to 20:1 as per instant claims 2 and 22-23 (see column 2, lines 10-15). Additionally, the reference discloses that the microfibers that are produced from uniaxially films have a very high modulus as per instant claims 6 and 7 (see column 2, lines 15-19). Figure 5 of the Perez reference details a biaxially oriented, two layer fibrillated film as per instant claims 17, 18, 20 and 30-31. The

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reference also discloses that the multi-layer film is manufactured by the coextrusion technique as per instant claim 16, 29, 30-31 and 35 (see column 14, lines 23-25). The invention provided by the reference discloses that the multi-layer film may have a fibrillated film layer and an additional layer that is either porous or non-porous and the fibrillated film layer may be an exterior layer or an interior layer and have high tensile strength as per instant claims 5, 7, 19, 29 and 30-31 (see column 13, lines 57-59). In addition, the reference also discloses that the multilayer article may have additionally layers that may be bonded or laminated to the fibrillated film and the additional layer as per instant claims 10, 12, 21 and 32-33 (see column 13, lines 55-63). Column 15, line 63-column 16, line 19) of the reference discloses that adhesives may be laminated onto the fibrillated films as per instant claims 9, 11, 13-14 and 25-27. Perez also discloses that the fibrous surface of the oriented films comprise a crystalline polymer component wherein the semicrystalline polymer that may be useful may include polypropylene as per instant claims 7-8, 15, 28 (see column 3, lines 15-36). The reference discloses that the final thickness of the film prior to fibrillation will be 0.025 to 0.5 mm as per instant claim 18 (see column 9, lines 44-49).

10. Claims 1 and 3-4 rejected under 35 U.S.C. 102(e) as being anticipated by Joseph et al., U.S. Patent 6,368,687.

The Joseph reference discloses a low trauma adhesive article wherein one embodiment may include a film that comprises multilayer microfibers as per instant claim 1 (see column 3, line 34-column 4, line 17 and column 2, lines 60-65). The reference also discloses that the material can be knit web of hydrophobic or hydrophilic fibers wherein the polymer of the bulk fiber can

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be a hydrophobic polymer, which can be coated with a hydrophilic surface as per instant claims 3 and 4 (see column 11, lines 35-40).

11. Claims 1 and 24 are rejected under 35 U.S.C. 102(e) as being anticipated by Perez et al., U.S. Patent Number 6,420,024.

Perez discloses a multilayer film comprised of microfibers as per instant claim 1 (see abstract and column 34, lines 49-67). In addition, the Perez reference discloses that the cross-sectional area of the microfibers are 0.7 square microns to 2.1 square microns as per instant claim 24 (see reference claim 7). The Perez et al., U.S. Patent Number 6,420,024, reference meets all the limitations of claims 1 and 24.

Claim Rejections - 35 USC § 103

12. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

13. Claims 36-38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Joseph et al., U.S. Patent Number 6,368,687.

The Joseph reference discloses a low trauma adhesive article wherein one embodiment may include a film that comprises multilayer microfibers. Joseph also teaches that a backing substrate to which the fibrous adhesive layer is adhered may be multi-layered with the layer

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closes to the fibrous adhesive layer being the absorbent material and that there may be additional layers as shown in the reference in column 12, lines 15-18. The reference does not teach that area of the first and second microfibrinous layers, which are adjacent to one another, are microfibrillated as per instant claim 36. Fibrillation affects the modulus and tensile strength of the article. Therefore, it would have been obvious to one of ordinary skill in the art to have the first and second microfibrinous layers, which are adjacent to one another, be microfibrillated in order to have a multi-layered article with a high modulus and high tensile strength. The Joseph reference discloses a spinneret process that can form patterns on one or more rows of fibers as per instant claim 37 (see column 4, lines 53-58). The reference also discloses that the material can be knit web of hydrophobic or hydrophilic fibers wherein the polymer of the bulk fiber can be a hydrophobic polymer, which can be coated with a hydrophilic surface as per instant claim 38 (see column 11, lines 35-40).

14. Claims 29 and 33-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Perez et al., U.S. Patent Number 6,331,343 in view of Joseph et al., U.S. Patent Number 6,368,687.

Perez discloses a co-extruded, oriented, multi-layer film comprising one or more microfiber forming layers as per instant claim 29 (see column 13, lines 55-58 and column 14, lines 22-24). Column 13, lines 59-65 of the Perez reference disclose a multi-layer construction wherein the fibrillated film layer may be an exterior or interior layer and may have an additional layer that may include a non-microfibrous layer such as an adhesive as per instant claim 33. Perez does not disclose that the microfiber layer can be microfibrillated to a hydrophobic surface and one other microfiber layer can be microfibrillated to a hydrophobic surface as per instant claim 34. Joseph

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teaches a low trauma adhesive article wherein one embodiment may include a film that comprises multilayer microfibers and that the material can be knit web of hydrophobic or hydrophilic fibers wherein the polymer of the bulk fiber can be a hydrophobic polymer, which can be coated with a hydrophilic surface as per instant claim 34 (see column 11, lines 35-40). The hydrophobicity and hydrophilicity of a film affects the absorbency of the film. Therefore, it would have been obvious to one of ordinary skill in the art to have one microfiber layer microfibrillated to a hydrophilic surface and one microfiber layer microfibrillated to a hydrophobic surface in order to increase level of water absorbency of the film as shown by the Joseph reference in column 11, lines 32-41.

Any inquiry concerning this communication or earlier communication from the examiner should be directed to Camie S. Thompson whose telephone number is (703) 305-4488. The examiner can normally be reached on Monday through Friday from 7:30 am to 4:00 pm. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cynthia H. Kelly, can be reached at (703) 308-0449. The fax phone numbers for the Group are (703) 872-9310 {before finals} and (703) 872-9311 {after finals}.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-0661.

CYNTHIA H. KELLY
SUPERVISOR
TECHNICAL GROUP 1760
